EUROQUARTZ

HCMOS 7x5mm 3.3V VCXO

EQVP-HC73 SERIES

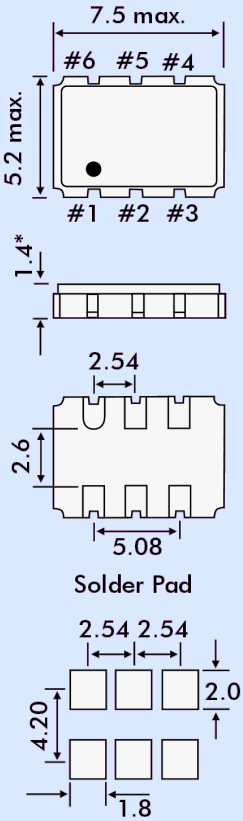
Freq: 0.75MHz to 250MHz

Features

- Extremely low jitter
- Low cost
- Express delivery
- Stability from ±20ppm, -40 to +85°C
- Absolute pull range ±50ppm
- Serial ID with comprehensive traceability

RoHS Compliant

OUTLINE & DIMENSIONS



Pad Connections

1	Voltage Control
2	Enable/Disable
3	Ground
4	Output
5	Not connected
6	Vdd

Description

The XPRESSO range of fully configurable VCXOs utilizes a family of proprietary ASICs developed for noise reduction to provide oscillators with noise levels comparable to traditional bulk-produced quartz and SAW-based VCXOs.

XPRESSO VCXOs are low-cost, low-noise, have a wide frequency range, excellent ambient performance and are available on very short leadtimes. All XPRESSO VCXOs are 100% final tested .

Typical applications

- Any application requiring an oscillator.
- SONET
- Ethernet
- Storage Area Networks
- Broadband Access
- Microprocessors/DSP/FPGA
- Industrial Controllers
- Test and measurement
- Fibre Channel

Electrical Specification

Frequency Range:	0.750MHz ~ 250.0MHz
Absolute Pull Range:	±50ppm
Operating Temperature Range:	-20° ~ +70° to -40° ~ +85°C
Storage Temperature Range:	-55 to +125°C
Supply Voltage:	+3.3VDC ±5%
Input Current	
0.75 ~ 20.0MHz:	32mA
20+ ~ 50.0MHz:	35mA
50+ ~ 130MHz:	47mA
130+ ~ 200MHz:	55mA
200+ ~ 250MHz:	60mA
Output Load:	15pF std., <125MHz 30pF
Start-up Time:	10ms
Output Enable/Disable Time:	100ns
Control Voltage Tuning Slope:	40 ~ 75ppm/V typical
Control Voltage Linearity:	±10%
Control Voltage Tuning Range:	0V ~ 3.3V
Modulation Bandwidth:	10kHz minimum
Nominal Control Voltage:	1.65 volts
Output Low Voltage	
0.75 ~ 150MHz:	10% Vdd maximum
150+ ~ 250MHz:	20% Vdd maximum
Output High Voltage:	
0.75 ~ 150MHz:	90% Vdd minimum
150+ ~ 250MHz:	80% Vdd minimum

Output Symmetry:	45/55%
Output Enable Voltage:	>70% Vdd max.
Output Disable Voltage:	<30% Vdd max.
Rise/Fall Times:	3ns maximum.

Supply Format

Tape and Reel, 16mm tape,
8.0mm pitch,
1k reel = 178mmØ
2k reel = 255mmØ

Model Selection Guide

EQVP - H C 7 3 B R - 35.328000

- H = HCMOS
- C = Ceramic
- 7 = 7 x 5mm
- 3 = 3.3V
- B = ±50ppm Absolute Pull Range
- R = -40 ~ +85°C
- Blank = -20~+70°C
- Frequency

Jitter Measurements

Frequency (MHz)	Phase Jitter (12kHz~20MHz) (ps RMS)	Time Interval Error σ of jitter distribution (ps RMS)	Rj/Dj Composition		
			Random Jitter (Rj) (ps RMS)	Deterministic Jitter (Dj) (ps p-p)	Total Jitter (Tj) (14*Rj)+Dj (ps)
62.5	0.93	2.8	1.28	6.8	25.1
106.25	0.86	3.2	1.28	8.4	26.6
125.0	0.75	2.7	1.20	8.0	25.2
156.25	0.77	3.3	1.27	8.6	26.6

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